

REMARKS

Claims 1-45 were pending. Without conceding any of the examiner's positions, the applicant has amended claims 1, 13, 21, 26, 28, 30, 32-33, 35, and 43-44. The applicant has added new claims 46-53 and cancelled claims 10-12 and 39-42, without prejudice. Claims 1-9, 13-38, and 43-53 are now pending and are submitted for consideration. Support for the new claims can be found throughout the specification and at least at page 7, line 25 - page 8, line 20.

The examiner rejected claim 35 under 35 U.S.C. § 112 for insufficient antecedent basis. Applicant has amended claim 35.

The examiner rejected claims 1-12, 21, 25-29, 32, 33, and 39-45 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,295,521 to DeMarcken ("DeMarcken"). DeMarcken does not anticipate each and every claim limitation of applicant's invention. Currently amended claim 1 recites reducing a larger set of travel options to a smaller set of diverse travel options ... that includes at least first and second travel options corresponding to first and second travel requirements, respectively, wherein the second travel requirement represents a different value in a category identical to the first travel requirement, and the travel options represent a flight and fare combination.

DeMarcken discloses a method for extracting a smaller set of travel options from a larger set of travel options. DeMarcken, however does not disclose a method for reducing the larger set to a set of diverse travel options. Moreover, DeMarcken does not disclose reducing that larger set...by selecting travel options for each of a plurality of diverse travel requirements. The areas of DeMarcken cited by the examiner (i.e., col. 49, lines 30-44, fig. 18, and col. 50, lines 22-39) do not disclose first and second travel options that satisfy first and second travel requirements, with the first and second travel requirement representing different values in a category of travel requirements. For example, page 5 of the applicant's specification teaches travel requirements 2 and 3, which are "all flights on American Airlines" and "all flights on United Airlines", respectively. Here, both travel requirements correspond to the category of all flights on a particular airline. The different values for these two specific examples are American Airlines and United Airlines. Similarly, travel requirements 5 and 6 correspond to the category of flights

departing at a particular segment of time, with the different values being morning and evening. In this specific example, diversity is ensured because the set of travel options will include flights on American and on United, regardless of which are the cheapest or most convenient (e.g., non-stop).

Because DeMarcken does not disclose each and every limitation of claim 1, a rejection under 35 U.S.C. § 102 is improper for claim 1 and its dependent claims 2-9 and 25. Independent claims 13, 21, 26, 28, and 43 contain similar limitations and they, and their dependent claims, are distinct for at least the same reasons. For at least these reasons, the applicant respectfully requests that any rejection under 35 U.S.C. § 102 of claims 1-9, 13-38, and 43 be withdrawn.

Currently amended claim 44 recites a computer program product causing a processor to generate a first ordered set of travel options using a first preference function, select travel options from the first set, the selected travel options corresponding to a plurality of diverse travel requirements, generate a second ordered set of travel options using a second preference function, the second preference function being different from the first preference function, select travel options from the second set, the selected travel options corresponding to a plurality of diverse travel requirements, and combine the selected travel options to generate the diverse set of travel options. DeMarcken discloses two value functions, cheapest and most convenient. DeMarken further discloses that these value functions may be applied to "a subset of the [pricing] graph." This does not however disclose the applicant's claimed invention. Namely that a diverse set of travel options is obtained by using a first and second preference function, and for each of those, selecting travel options corresponding to a plurality of diverse travel requirements. Because DeMarcken does not disclose each and every limitation of claim 44, a rejection under 35 U.S.C. § 102 is improper for claim 44 and its dependent claim 45. For at least these reasons, the applicant respectfully requests that any rejection under 35 U.S.C. § 102 of claims 44-45 be withdrawn.

The examiner rejected claims 13-20, 22-24, and 31 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,295,521 to DeMarcken ("DeMarcken") in view of U.S. Patent No. 5,331,546 to Webber ("Webber"). As described above, DeMarken does not disclose

every limitation of the applicant's claimed invention. Webber does not teach or suggest what DeMarken lacks. Webber does not mention diversity or generating a diverse set of travel options. The examiner cites Fig. 4 and Fig. 6 in Webber. Webber states:

The purpose of the flight search procedure illustrated in FIG. 4 is to find all of the itineraries which could be used to satisfy the trip request being processed (e.g., for which flight and seats are available and which meet the constraints of the relevant policy file and traveller file and any other constraints that may have been keyed in FIG. 3) and to rank these candidate itineraries in terms of "non-preference" factors (e.g., wide body aircraft is better, stops are undesirable, etc.) and to rank them in terms of personal preference factors (e.g., this traveller prefers this particular airline and dislikes another airline, or wishes to avoid a particular airport, etc.). The output of this flight search procedure of FIG. 4 is a set of itineraries which have survived so far as candidates for this trip, ranked as stated, which can then be processed in accordance with the procedure of FIG. 5 to find the lowest fare candidate itineraries from which the travel arranger Tan select one for this trip request. [Webber, col. 7, line 53-col. 8 line 2]

The ranking process is shown in elements 142 and 144. As shown, each itinerary gets both a preference rank and a non-preference rank. In element 144, the first step is to set the preference rank equal to the non-preference rank and then adjust based on airlines and airports. If there is no preference by airport or airlines, then the non-preference ranking will equal the preference ranking. Fig. 6 chooses itineraries based on ranking. This process does not teach or suggest the applicant's claimed invention that generates a set of diverse travel options that includes at least first and second travel options corresponding to first and second travel requirements, respectively, wherein the second travel requirement represents a different value in a category identical to the first travel requirement. In contrast to applicant's invention, the Webber process for example, ranks the preference ranking of itineraries with preferred airlines higher than non-preferred airlines and the non-preference ranking of itineraries with less stops higher than those with more stops. [see Webber, col. 7, line 53-col. 8 line 2, above] Thus, using both of the rankings can still generate a list that contains only non-stop flights on the preferred airline.

Because neither DeMarcken nor Webber, alone or in combination, teaches or suggests each and every limitation the applicant's claimed invention, a rejection under 35 U.S.C. § 103 is improper and the applicant respectfully requests that any rejection under 35 U.S.C. § 103 of claims 13-20, 22-24, and 31 be withdrawn.

Applicant has added new claims 46-53. These claim are distinct over DeMarcken since does not teach each and every limitation of the claims. Claim 46 recites ... establishing a plurality of travel requirement templates, for each travel requirement template, defining a plurality of travel requirements, each of the travel requirements corresponding to a different value of the respective travel requirement template ..., and for each travel requirement in the set of diversity requirements selecting from the candidate set of travel options a travel option that satisfies that travel requirement, combining the selected travel options ... to generate the diverse set of travel options Neither DeMarken nor Webber, alone or in combination, teaches or suggests using different values of a travel requirement template to define a plurality of travel requirements. Neither describes nor suggests that for each travel requirement in the set of diversity requirements to select from the candidate set of travel options a travel option that satisfies that travel requirement, combine the selected travel options ... to generate the diverse set of travel options. Claim 46 and its dependent claims 47-49 are distinct for at least these reasons.

Claims 50-53, which are drawn to a computer program product including similar limitation as claims 46-49 and are distinct for similar reasons as claims 46-49.

Enclosed are a \$18.00 check for excess claim fees and a \$110.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

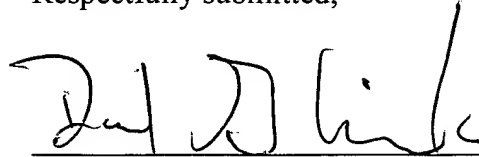
Applicant : Carl G. DeMarcken
Serial No. : 09/431,699
Filed : November 1, 1999
Page : 17 of 17

Attorney's Docket No.: 09765-016001

Respectfully submitted,

Date: _____

12/01/03



David Miranda
Reg. No. 42,898

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

20736753.doc